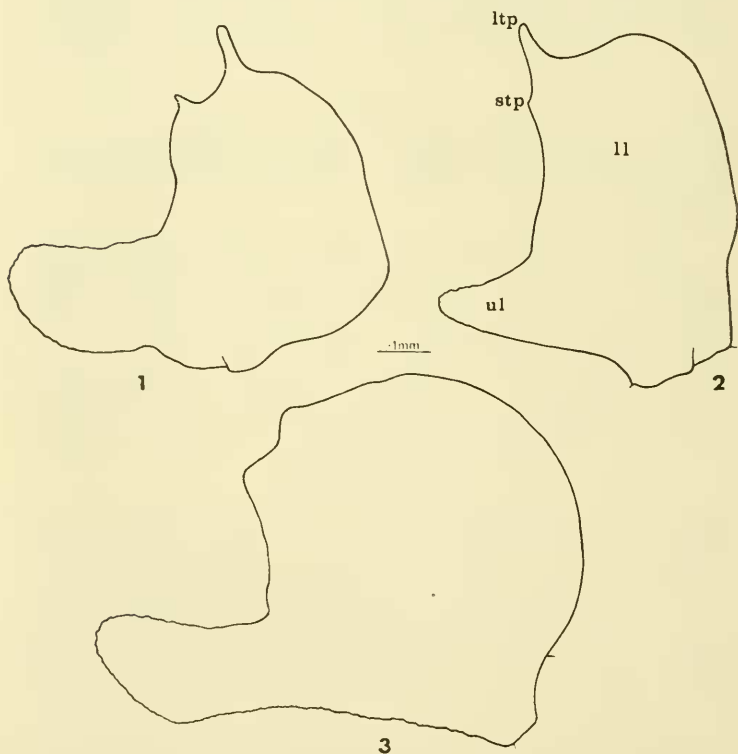


Sphaerophoria virgata Goeldlin (Dipt.: Syrphidae)
New to the British Isles

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In a recent paper on species of the *Sphaerophoria menthastri* group occurring in the British Isles (see Speight, 1973), I mentioned the existence in my own collection of a specimen belonging to an unknown species of this complex. Since then I have collected a second specimen and subsequently sent both to Dr. Goeldlin de Tiefenau, who is undertaking a revision of the European *Sphaerophoria* species. Dr. Goeldlin has now returned my specimens, determined as his species *S. virgata*, whose description was published in 1974 (see Goeldlin, 1974). Goeldlin's description of *S. virgata* is as follows: —

“ressemble à *S. philanthus* (Mg.), bona species, mais le lobe inférieur des styles est beaucoup plus allongé et la profonde



Figs.: external, lateral view of left surstylus of *Sphaerophoria* species. Fig. 1: *S. philanthus*. Fig. 2: *S. virgata*. Fig. 3: *S. scripta*.

Abbreviations: ll=lower lobe; ltp=larger terminal process; stp=smaller terminal process; ul=upper lobe.

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échancrure située à l'extrémité de la marge supérieure de ce même lobe chez *S. philanthus* est presque inexistante chez *virgata*." Judging from the three specimens available to me, *S. virgata* may be distinguished from other members of the *S. menthastri* group only by characters of the genitalia. As Goeldlin's description implies, the shape of the surstyli is highly distinctive and in itself adequate to distinguish *S. virgata* from other European *Sphaerophoria* species. The only British Isles species with surstyli somewhat similar in shape to those of *S. virgata* are *S. philanthus* and *S. scripta* (see figs.).

In my key to *Sphaerophoria* species (l.c.), *S. virgata* would run as far as couplet 8, but then fails to fit either of the alternatives offered. In order to identify *S. virgata* using that key, the key could be modified as follows:

- 8. Larger terminal process of lower lobe of left surstylus finger-like, narrowing progressively from base to tip (external, lateral view) 8a
 - larger terminal process of lower lobe of left surstylus spatulate, expanding initially from base towards tip, narrowing again at actual tip (external, lateral view); smaller terminal process of lower lobe well-developed; basal projection in angle between upper and lower lobes of surstyli hardly visible (external, lateral view), present but reflexed towards interior of genital capsule; (tergites 2-4 with yellow bands entire or divided, which may or may not reach the side margins); wing-length 4.5-6.25 mm; Common, generally distributed (Ireland) IV-IX *menthastri* (L.)
- 8a. Basal projection in angle between upper and lower surstylar lobes well developed, more or less triangular (external, lateral view); both terminal processes of lower lobe of left surstylus evident, even though they may be small 9
 - basal projection in angle between upper and lower surstylar lobes entirely lacking, absent even in a reflexed condition; smaller of the terminal processes of the lower lobe of the left surstylus vestigial or absent; (tarsi sometimes somewhat darker than corresponding tibiae; tergites usually with entire yellow bands); wing-length 4.75-5 mm; Scotland (Rannoch, Perth) and England New Forest, Hants.) V-VII *virgata* Goeldlin

The following characters should serve to differentiate *S. virgata* from the other *Sphaerophoria* species, using the above in the absence of the complete key:

S. virgata: antennae yellow; yellow, lateral mesonotal stripe complete to scutellum; abdomen about the same length as the wings.

Both of the localities from which I have collected *S. virgata* are boggy heathland giving way to open woodland. On the Continent *S. virgata* is known definitely from Denmark, Norway and Switzerland.

ACKNOWLEDGEMENTS

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REFERENCES

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- Speight, M. C. D. 1973. British species of *Sphaerophoria* (Dipt. Syrphidae) confused with *S. menthastris* (L.), including a key to the males of the seven species of *Sphaerophoria* found in the British Isles. *Entomologist*, **106**, 228-233.

Current Literature

The Naturalist in Britain by **D. E. Allen**. xii + 292 pp., 13 pls. and other illu. Allen Lane, 1976. £9.

This book is a general survey of the social history of naturalists in Britain. Written with enthusiasm and scholarship by a well-known botanist, the fourteen chapters encompass the period from the seventeenth century "herbarizings" organized by the Society of Apothecaries to the present day of computerized mapping, nationwide conservation and societies with memberships running into thousands. Among the various disciplines covered are geology, conchology, palaeontology, entomology, ornithology and of course botany. Documentation at the end in the form of chapter-by-chapter synopses of the main sources followed by a useful general index concludes an interesting and readable book.

Mites of Moths and Butterflies by **A. E. Treat**. 362 pp., 150 figs., coloured frontis. Cornell University Press, 1976. £17.50.

This book is probably the only one that treats comprehensively of the associations of mites with lepidoptera, and is a thorough survey of the known acarine parasites, phoretics, and scavengers found on moths and butterflies.

The work is in four parts. Part 1 consists of three introductory chapters with an account of early discoveries, a discussion on equipment and methods for studying mites and a general description of their structure, development and classification. Part 2, treats of the Mesostigmata. Part 3, the Acariformes. Each of the ninety-odd species in these groups is described, illustrated and discussed in terms of its occurrence, distribution records from lepidoptera and, when known, its biology and behaviour. Finally, part 4 consists of three appendices with keys for the tentative identification of both living and mounted specimens, a tabulation of host species with the mite species recorded from each, and a tabulation of mite species with the recorded hosts of each. The coverage is worldwide. The book concludes with a list of some 350 books cited and a general index. About half of the illustrations are from original drawings by the author.